

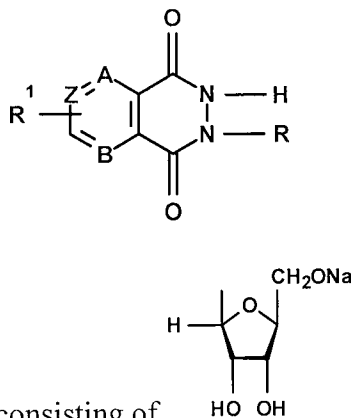
AMENDMENTS TO THE CLAIMS

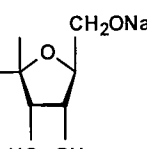
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-70. (Cancelled)

71. (Currently amended) A method for ~~treatment of reversible abnormal changes in pH~~ normalizing an acid-base balance of nucleated and non-nucleated cells, said method comprising administering to a subject in need of such treatment a pharmaceutically-effective amount of a biologically-active compound in order to normalize the endocellular pH to the physiologically acceptable levels, wherein said biologically-active compound has a general structural formula:



where R is selected from the group consisting of , Li, Na, and K;

R¹ is selected from the group consisting of -H, -NH₂, -Br, -Cl, -OH, and -COOH;

B is selected from the group consisting of -N=, -CH=, and -CR¹=;

Z is selected from the group consisting of -CH=, -CR¹=, and -N=; and

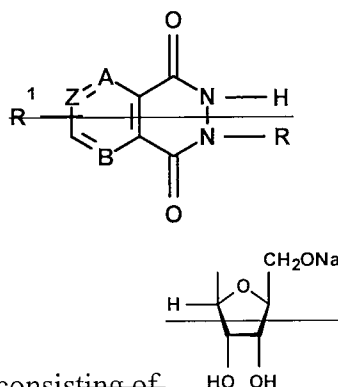
A is selected from the group consisting of -N=, -CH=, and -CR¹=;

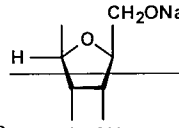
wherein when A is -N=, then B is -N= and Z is -CR¹=, and wherein when A is -CR¹=,

then B is -CH= and Z is -CH=,
and pharmacologically acceptable salts thereof.

72-96. (Cancelled)

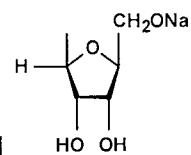
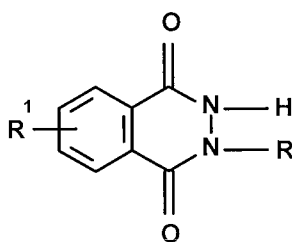
97. (Currently amended) ~~[[A]]~~ The method as claimed in Claim 71, wherein the
normalization of the acid-base balance decreases for treatment of increased aggregation of
thrombocytes and erythrocytes, said method comprising administering to a subject in need of
such treatment a pharmaceutically effective amount of a biologically active compound having a
general structural formula:



where R is selected from the group consisting of , Li, Na, and K;
R⁺ is selected from the group consisting of H, NH₂, Br, Cl, OH, and COOH;
B is selected from the group consisting of N=, CH= and CR⁺=;
Z is selected from the group consisting of CR⁺=, CH= and N=; and
A is selected from the group consisting of N=, CH= and CR⁺=;
wherein when A is N=, then B is N= and Z is CR⁺=, and wherein when A is CR⁺=,
then B is -CH= and Z is -CH=,
and pharmacologically acceptable salts thereof.

98.-102 (Cancelled)

103. (Original) The method as claimed in any of Claims 71 ~~or 86, 90, 93, 95, 97, 99 or 101~~, wherein the cyclic bioisostere is a derivative of benzo[d]-3H-pyridazine-1,4-dione, having a general formula



where R selected from the group consisting of the atom of Li, Na, K, and is selected from the group consisting of -H, -NH₂, -Cl, OH, and -COOH.

104. (Currently amended) The method as claimed in Claim 103 ~~any of Claims 71, 86, 90, 93, 95, 97, 99, or 101~~, wherein the biologically-active compound is selected from the group consisting of:

sodium salt of 2-(β-D-ribofuranosile)benzo[d]-3H-pyridazine-1,4-dione,

sodium salt of 5-amino-2-(β-D-ribofuranosile)benzo[d]-3H-pyridazine-1,4-dione,

sodium salt of 6-amino-2-(β-D-ribofuranosile)benzo[d]-3H-pyridazine-1,4-dione,

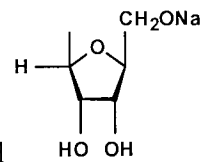
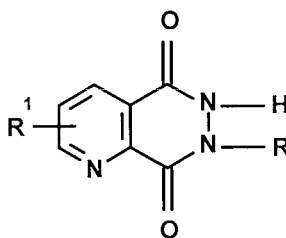
sodium salt of 5-chlorine-2-(β-D-ribofuranosile)benzo[d]-3H-pyridazine-1,4-dione,

disodium salt of 5-hydroxy-2-(β-D-ribofuranosile)benzo[d]-3H-pyridazine-1,4-dione,

lithium salt of 5-amino-benzo[d]-3H-pyridazine-1,4-dione,

sodium salt of 5-amino-benzo[d]-3H-pyridazine-1,4-dione,
potassium salt of 6-amino-benzo[d]-3H-pyridazine-1,4-dione,
disodium salt of 5-hydroxy-benzo[d]-3H-pyridazine-1,4-dione, and
disodium salt of 6-carboxy-benzo[d]-3H-pyridazine-1,4-dione.

105. (Withdrawn- currently amended) The method as claimed in any of Claims 71 ~~or~~ 86, 90,
~~93, 95, 97, 99 or 101~~, wherein the cyclic bioisostere is a derivative of pyrido[2,3-d]-6H-
pyridazine-5,8-dione, having a general formula

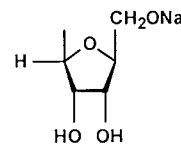
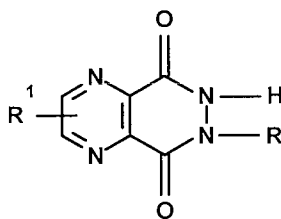


where R is selected from the group consisting of the atom of Li, Na, K, and CH_2ONa ; and
R¹ is selected from the group consisting of -H, -NH₂, -Br, -OH, and -COOH.

106. (Currently amended) The method as claimed in any of Claims 71 ~~or~~ 86, 90, 93, 95, 97,
~~99 or 101~~, wherein the biologically-active compound is selected from the group consisting of:
sodium salt of 7-(β -B-ribofuranosile)pyrido[2,3-d]-6H-pyridazine-5,8-dione,
sodium salt of 4-amino-7-(β -B-ribofuranosile)pyrido[2,3-d]-6H-pyridazine-5,8-dione ,
sodium salt of 3-bromine-7-(β -D-ribofuranosile)pyrido[2,3-d]-6H-pyridazine-5,8-dione,
disodium salt of 4-hydroxy-7-(β -D-ribofuranosile)pyrido[2,3-d]-6H-pyridazine-5,8-dione ,

disodium salt of 3-carboxy-7-(β -D-ribofuranosile)pyrido[2,3-d]-6H-pyridazine-5,8-dione ,
lithium salt of pyrido[2,3-d]-6H-pyridazine-5,8-dione,
sodium salt of pyrido[2,3-d]-6H-pyridazine-5,8-dione , and
potassium salt of pyrido[2,3-d]-6H-pyridazine-5,8-dione.

107. (Withdrawn- currently amended) The method as claimed in any of Claims 71 ~~or~~ , 86, 90, 93, 95, 97, 99 ~~or~~ 101, wherein the cyclic bioisostere is a derivative of pyrazine[2,3-d]-6H-pyridazine-5,8-dione, having a general formula

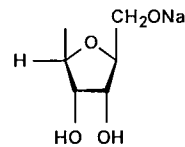
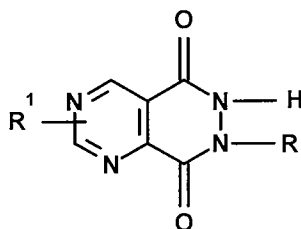


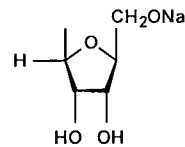
where R is selected from the group consisting of the atom of Li, Na, K, and
R¹ is selected from the group consisting of -H, -NH₂, -Br, -OH, and -COOH.

108. (Currently amended) The method as claimed in any of Claims 71 ~~or~~ , 86, 90, 93, 95, 97, 99 ~~or~~ 101, wherein the biologically-active compound is selected from the group consisting of:
sodium salt of 7-(β -D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,
sodium salt of 2-amino-7-(β -D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,
sodium salt of 3-amino-7-(β -D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,
sodium salt of 3-bromine-7-(β -D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,
disodium salt of 2-hydroxy-7-(β -D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,

disodium salt of 2-carboxy-7-(β -D-ribofuranosile)pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,
lithium salt of pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,
sodium salt of pyrazine[2,3-d]-6H-pyridazine-5,8-dione ,
potassium salt of 3-bromine-pyrazine[2,3-d]-6H- pyridazine-5,8-dione , and
sodium salt of 2-amino-pyrazine[2,3-d]-6H-pyridazine-5,8-dione.

109. (Withdrawn- currently amended) The method as claimed in any of Claims 71 or ,~~86, 90,~~
~~93, 95, 97, 99 or 101~~, wherein the cyclic bioisostere is a derivative of pyrimido[4,5-d]-6H-
pyrodazine-5,8-dione, having a general formula



where R is selected from the group consisting of the atom of Li, Na, K, and  ; and
R¹ is selected from the group consisting of -H, -NH₂, -Br, -OH, and -COOH .

110. (Currently amended) The method as claimed in any of Claims 71 or ,~~86, 90, 93, 95, 97,~~
~~99 or 101~~, wherein the biologically-active compound is selected from the group consisting of:
sodium salt of 7-(β -D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione,
sodium salt of 2-amino-7-(β -D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione,
sodium salt of 4-amino-7(β -D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione ,
sodium salt of 2-bromine-7-(β -D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione ,

sodium salt of 4-hydroxy-7-(β -D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione ,
sodium salt of 4-carboxy-7-(β -D-ribofuranosile)pyrimido[4,5-d]-6H-pyridazine-5,8-dione ,
lithium salt of pyrimido[4,5-d]-6H-pyridazine-5,8-dione ,
sodium salt of 2-amino-pyrimido[4,5-d]-6H-pyridazine-5,8-dione , and
potassium salt of 4-bromine-pyrimido[4,5-d]-6H-pyridazine-5,8-dione.